GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA

UNSTARRED QUESTION NO:2032
ANSWERED ON:05.08.2005
CYCLONES IN INDIA
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Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether 13 per cent of the world's cyclones occur in the ocean around India;

(b) if so, whether the Government has conducted any research in this regard ;

(c) if so, the outcome of the study; and

(d) the action taken by the Government thereon?

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE (INDEPENDENT CHARGE) OF THE DEPARTMENT OF OCEAN DEVELOPMENT (SHRI KAPIL SIBAL)

(a) No, Sir. Only 7% of the world's cyclones occur over North Indian ocean.

(b) A long series of data on tropical cyclone over North Indian ocean (from 1877 onwards) is available. A systematic study and extensive research work has been carried out in respect of cyclone climatology relating to genesis, development, track forecasting and storm surge prediction etc.

(c) In the field of climatology, India Meteorological Department (IMD) has brought out an Atlas on the 'Track of Storms and Depressions in the Bay of Bengal and Arabian Sea' for the period 1877 to 1970 and another volume to cover the period 1971-1990. The same is being updated every year from 1991 onwards.

IMD has come out with a Quasi-Langrangian Model for track forecast of tropical cyclones with a horizontal resolution of 40 km. The model has been updated to get 6 hourly track forecast up to 72 hrs. The forecast graphic output of this model is made available on IMD web site.

For the storm surge prediction, IMD uses both Nomograms developed by IMD and Dynamical Storm Surge Model developed by IIT, New Delhi. Very recently IMD has also implemented Dynamical storm surge model of NIOT, Chennai for the east coast of India on experimental mode.

(d) In view of (c) above, the accuracy of cyclone forecasts issued by IMD is generally at par with tropical cyclone forecast services of other developed countries like USA, Japan, Australia etc. However, with the development of new observing systems such as Buoys, Doppler Radars and new generation Satellite, these forecasts are likely to improve further.